

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-09700009-2012
Application Received: **November 02, 2011**
Plant Identification Number: **09700009**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Cleveland Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, SE**
Charleston, WV 25314

Issued: October 31, 2012

Physical Location:	Kanawha Head, Upshur County, West Virginia
UTM Coordinates:	555.4 km Easting • 4,289.1 km Northing • Zone 17
Directions:	Travel approximately 9.4 miles south on WV State Rt. 20 from the town of Rock Cave to station.

Facility Description

The Cleveland Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of six (6) 1,100-hp and four (4) 2,000-hp reciprocating engines, one (1) 3,165-hp turbine engine, one (1) reciprocating engine/emergency generator, a wastewater injection evaporation system (WE1 to E09 & E10) and numerous storage tanks of various sizes. For comfort heating purposes the facility also operates a number of small space heaters (de minimus).

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2011 Actual Emissions
Carbon Monoxide (CO)	85.62	35.04
Nitrogen Oxides (NO _x)	1118.86	532.50
Particulate Matter (PM ₁₀)	20.91	9.52
Total Particulate Matter (TSP)	20.91	9.52
Sulfur Dioxide (SO ₂)	0.49	0.21
Volatile Organic Compounds (VOC)	76.42	40.91
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2011 Actual Emissions
Formaldehyde	30.69	13.61
Other HAPs	6.39	0
Total HAPs	37.08	13.61

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 1118.86 tons/yr of NO_x, 30.69 tons/yr of Formaldehyde and 37.08 tons/yr of total HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Columbia Gas Transmission, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for hazardous air pollutants
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).

	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Particulate Fugitive

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
None		

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

Determinations and Justifications

There have been no changes to equipment at the Cleveland Compressor Station since the previous Title V renewal permit.

This facility was previously registered under General Permit R30-NGGP-2007 for Natural Gas Compressor Facilities. The Division of Air Quality did not renew the general permit for natural gas compressor facilities, therefore this facility's renewal will be issued as a source-specific permit. The source-specific permit includes various requirements which are potentially applicable to natural gas compressor stations. The applicable requirements column in the Section 1.0 Emission Units Table of the permit indicates which of the requirements in Sections 2.0 through 24.0 are applicable to each emissions unit.

Below is a discussion of applicable rules:

1. 45CSR4; *To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors*-This facility is subject to 45CSR4 according to sections 3.1.4 and 3.4.3 of the permit.
2. 45CSR17; *To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter*-This rule sets a standard for fugitive particulate matter, which is not to be discharged beyond the facility boundary lines which causes statutory air pollution.

Compliance with this standard will be met by the facility submitting a control plan if the Director finds the facility in violation of this rule.

3. 40 CFR Part 63 Subpart ZZZZ; *RICE MACT*- Engines E01, E02, E03, E04, E05, E06, E07, E08, E09 and E10 are existing non-emergency SI 2SLB engines greater than 500HP located at a major source of HAPs. Pursuant to 40 C.F.R. §63.6590(b)(3)(i) and 63.6600(c), these engines do not have any requirements under 40 C.F.R Part 63 Subpart ZZZZ.
4. Engine G4 is an existing emergency SI engine less than or equal to 500 HP located at a major source of HAPs. Pursuant to 40 C.F.R. §63.6595(a) this engine has to comply with 40 CFR Part 63 Subpart ZZZZ no later than October 19, 2013. Engine G4 is subject to the following sections of 40 CFR Part 63 Subpart ZZZZ:

§63.6595(a)(1); §63.6602 (Table 2c, Item 6); §63.6605; §§63.6625 (e), (f), (h), (j); §§63.6640 (a) (Table 6, Item 9), (b), (e), (f) (1); §63.6645 (a) (5); §§63.6655 (a), (b), (d), (e), (f); Footnote 1 of 40 C.F.R. 63, Subpart ZZZZ, Table 2c; §63.6665; and the general provisions of 40 C.F.R. Part 63.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 45CSR2; *To prevent and control particulate air pollution from combustion of fuel in indirect heat exchangers*-This facility does not have any indirect heat exchangers; hence this rule is not applicable to this facility.
2. 45CSR6; *Control of air pollution from combustion of refuse*-This facility does not have any incinerator (or flare) - hence this rule is not applicable to this facility.
3. 45CSR10; *To prevent and control air pollution from the emission of sulfur oxides*-The director has determined that 45CSR10 does not apply to natural gas fired engines.
4. 40 C.F.R. 60 Subpart GG; *Standards of Performance for Stationary Gas Turbines* - There is one turbine at Cleveland station which was installed in 1970. No modifications to the turbine have occurred since the original installation.
5. 40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at Cleveland station are below 40,000 gallons in capacity.
6. 40 C.F.R. 60 Subpart Kb; *Standards of Performance for Volatile Organic Liquid Storage Vessels* - All tanks at Cleveland station are below 75 m³ in capacity.
7. 40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Cleveland station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.
8. 45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*- This facility is not located in one of the affected counties.
9. 45CSR27; *To Prevent and Control the Emissions of Toxic Air Pollutants*- Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment “used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.”

10. 40 C.F.R. 63 Subpart YYYY; *Turbine MACT* - There is one turbine at Cleveland station which was installed in 1970. No modifications to the turbine have occurred since the original installation; hence it is an existing turbine and not subject to this MACT per 40 C.F.R§ 63.6090(b)(4).
11. 40 C.F.R. 60 Subpart KKKK; *Turbine NSPS* - There is one turbine at Cleveland station which was installed in 1970. No modifications to the turbine have occurred since the original installation; hence it is not subject to this NSPS.
12. 40 C.F.R. Part 60 Subpart Dc; *Standards of Performance for Steam Generating Units*. The Cleveland Compressor Station is not subject to 40 C.F.R. Part 60 Subpart Dc since there is not any boiler at this facility.
13. 40 C.F.R. 60 Subpart JJJJ; *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* – Engines at the facility were constructed, reconstructed, or modified prior to June 12, 2006.
14. 40 C.F.R. Part 60 Subpart IIII; *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* –The provisions of this subpart are not applicable to this facility because there are no stationary compression ignition (CI) internal combustion engines (ICE) at this facility.
15. 40 C.F.R. Part 63 Subpart HH; *National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities* -This rule is not applicable to this facility because this facility is not an oil and gas production facility.
16. 40 C.F.R. 63 Subpart HHH; *National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities* – The facility does not have a glycol dehydration unit and is therefore not subject to the requirements of this subpart per 40 C.F.R§ 63.1270 (c).
17. 40 C.F.R. Part 63 Subpart DDDDD; *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* -The provisions of this subpart are not applicable to this facility because the facility does not have any boilers or process heaters.
18. 40 C.F.R. Part 63 Subpart JJJJJ; *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*-This facility is a major source and does not have any boiler; hence this rule is not applicable to this facility.
19. 40 CFR 64; *Compliance Assurance Monitoring*- Engines do not have any add-on control; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility.

There are no Greenhouse Gas Clean Air Act requirements for this facility because the facility has not made any changes that triggered a PSD permit modification.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date:	September 14, 2012
Ending Date:	October 15, 2012

All written comments should be addressed to the following individual and office:

Beena Modi
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Beena Modi
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1228 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Per Company's comment, following change has been made to this permit:

- Engine G4 is an existing emergency SI engine less than or equal to 500 HP located at a major source of HAPs. Engine G4 is subject to 40 CFR Part 63 Subpart ZZZZ and requirements are updated in this permit.
- The change is about the applicability of 40 CFR Part 63 Subpart ZZZZ for the emergency generator (Emission Unit ID-060G4) in section 1.0, where it states "and the general provisions of 40 C.F.R. Part 63." 40CFR §63.6645 (a) (5) excludes some of the general provisions. So per company's request, language has been changed to "and the general provisions of 40 C.F.R. Part 63 except as excluded in 40CFR§63.6645."